

Clean Fuel Option BIO DIESEL

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Introduction

- Who is Karl Radune and what is he doing here?
 - ◆ Owner of DTW L.L.C.
 - ◆ Mechanical Engineer BSME - 24 yrs
 - ◆ Manufacturing experience –24 yrs
 - ◆ Machine designer & builder – 16 yrs
 - ◆ Bio Diesel enthusiast – 1.5 yrs
 - ◆ ConnPIRG member - 0.5 yrs

VISION FOR CONNECTICUT

Connecticut as leader in Bio Diesel Technologies

Large Scale Bio Diesel Manufacturing Plant in CT

Clean Air

Bio Diesel extensively use for home heating

Healthy Kids

Bio Diesel Consumer Incentives

Create jobs

Bio Diesel as ubiquitous as Petro diesel

Topics of Discussion

- Bio Diesel – Consumer Acceptance
- Bio Diesel – DTW Reactor Project
- Bio Diesel – Central CT Bio Diesel Consumer Cooperative
- Bio Diesel – How can the DEP and other state agencies help.

Bio Diesel Consumer Acceptance

- Price, B-100 vs Petro Diesel
- Environmental benefits
- Vehicle Engine Performance
- Auto Maker Warranties
- Home grown and renewable
- Supplying a growing demand

Bio Diesel Consumer Acceptance

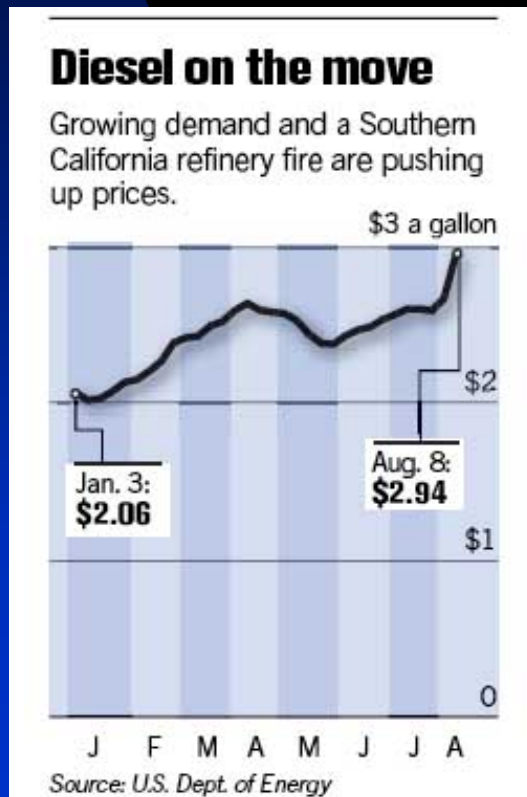
Price, B-100 vs Petro Diesel

World Energy
Bulk Purchases
\$3.00/gallon



Bio Diesel Consumer Acceptance

Price, B-100 vs Petro Diesel



“Texas oilman T.Boone Pickens, who was derided earlier this year when he predicted \$60 a barrel oil, now forecasts that crude price will hit \$75.” 8/13/2005

Bio Diesel Consumer Acceptance

■ Environmental benefits

Bio Diesel is currently the only fuel which meets the EPA Tier 1 & Tier 2 Clean air targets.

Bio Diesel emissions vs. Petro Diesel

No Sulfur Dioxide emissions

48% reduction in CO emissions

67% reduction in unburned hydrocarbons

47% reduction in particulate matter

80% reduction in PAH (polycyclic aromatic hydrocarbons)

10% increase in NOx (nitrogen oxides)*

Bio Diesel Consumer Acceptance

- Environmental benefits, cont..

Non toxic

Biodegradable

Higher flashpoint – safer

Bio Diesel Consumer Acceptance

- **Engine Performance**

Lubricates Engine

Runs smoother, cooler

Seals & flexible fuel lines

In Line Fuel tank Filter & CFPP

*** Retard injecting timing 2-3 degrees to
reduce NOx emissions**

Bio Diesel Consumer Acceptance

- Auto Maker Warranties
 - ◆ B-5 to B-20 in US
 - ◆ B-80 to B-100 in Europe
 - ◆ Volkswagen

Bio Diesel Consumer Acceptance

Home grown and renewable



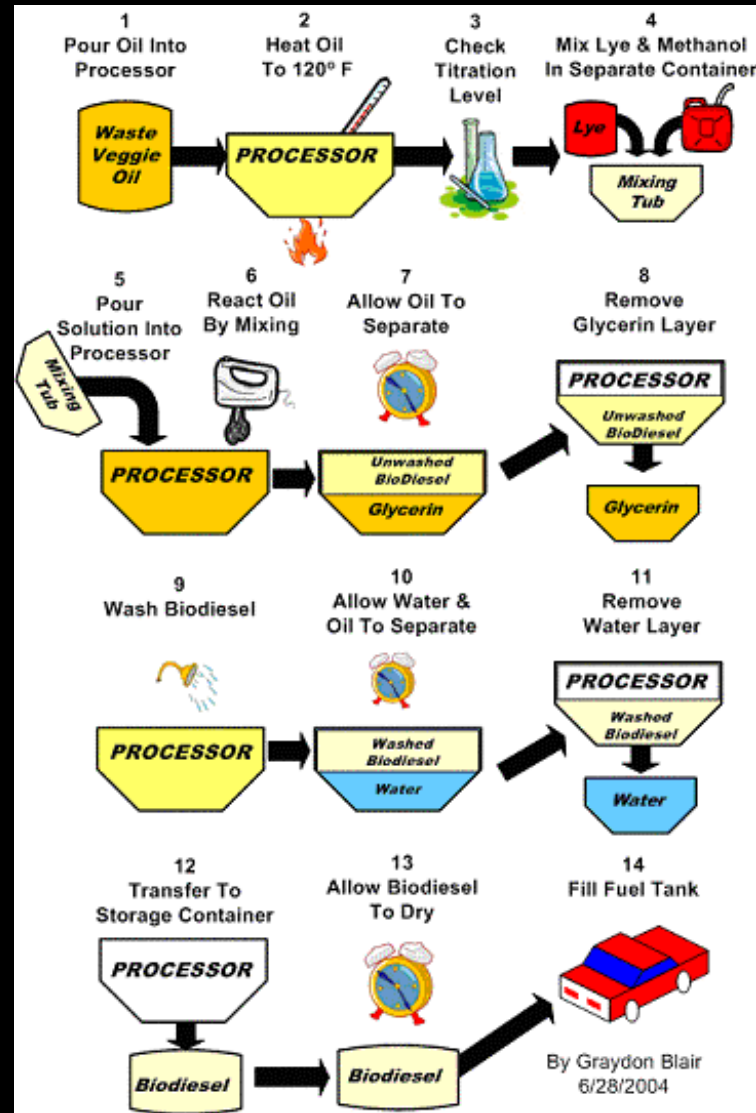
Bio Diesel Consumer Acceptance

- Supplying the growing demand
 - ◆ Large scale manufactures
 - ◆ Distributors
 - ◆ Blenders
 - ◆ Home brewers

Bio Diesel DTW Reactor Project

- Designed & Build by Machine Experts
- 1000 gal/week capacity
- Two Stage method
- Vacuum drying – SWO & WVO & BD
- Multiple Wash tanks
- Expandable to Centrifuge separation
- Methanol recovery
- Glycerin Waste Disposal

Bio Diesel DTW Reactor Project



Bio Diesel of Central CT Consumer Cooperative

Structure:

Legal Non-Profit Consumer Cooperative recognized by the State of Connecticut and the Federal Government. All activities to be overseen by the member elected Board of Directors. Expenses shared equally by the Co-op members with any income use to reduce member participation costs.

Mission Statement:

To create a legal entity for the manufacture and distribution of B-100 Bio Diesel fuel for co-op members. The co-op will provide B-100 for Marine vehicles, land vehicles, and home heating fuels for co-op member's use.

Bio Diesel of Central CT Consumer Cooperative

Goals-Short term

To provide a reliable source of B-100 fuel in order to develop an extensive, accepting, and loyal member base.

To counter act the emergence and control of “Big Oil” and existing oil distribution networks control over this alternate fuel resource, in order to keep the cost savings in the hands of the consumer.

Bio Diesel of Central CT Consumer Cooperative

Goals – Long Term

To foster the creation, growth, and success of other Bio Diesel Co-ops.

To develop an umbrella organization for a state or region wide network of manufactures, distributors, and consumers of B-100 Bio Diesel.

Bio Diesel of Central CT Consumer Cooperative

By the previous acts:

Insure a fair price and steady supply of B-100 fuel.

Accelerate the acceptance of Bio Diesel as a safe environmentally superior alternative to Petro Diesel.

Reduce the impact of price setting by “Big Oil”.

Reduce the reliance on Foreign Oil.

Create jobs for local economies.

How the DEP and other CT Agencies Help

- Insure incentives get to the consumer
- Legislate that automakers honor vehicle warranties in CT.
- Recognize that B-90 with anti-gels can be used successfully year long in CT.
- Support Pilot programs for B-100 used as home heating fuel.
- Support legislation that does not limit vegetable oil sources for Bio Diesel. IE Virgin soy oil

Questions?

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THANK YOU

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